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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,478	06/14/2001	Geoffrey Howard Blackham	GJ-223J	7893
7590 06/27/2006			EXAMINER	
Iandiorio & Teska 260 Bear Hill Road Waltham, MA 02451-1018			DHARIA, PRABODH M	
			ART UNIT	PAPER NUMBER
			2629	

DATE MAILED: 06/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/881,478	BLACKHAM ET AL.	
	Examiner	Art Unit	
	Prabodh M. Dharja	2629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 11-18 is/are pending in the application.
4a) Of the above claim(s) 1-10 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 11-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. **Status:** Please all the replies and correspondence should be addressed to Examiner's new art unit 2629. Receipt is acknowledged of papers submitted on 05-10-2006 under request for reconsideration has been placed of record in the file. Claims 11-18 are pending in this action. Claims 1-10 are cancelled.

Response to Amendment

2. The amendment to abstract filed on 05-10-2006 under abstract is sufficient to overcome the objection to abstract. Therefore objection to abstract is withdrawn.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 11-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Gwynn (US 6,259,429 B1) in view of Richards et al. ((5,694,533).

In reference to claim 11, Gwynn teaches a multi-channel image display device (Col. 1, lines 4,5)

However, Gwynn fails to teach at least two low frame rate source channels for forming a background scene, at least one high frame rate source channel and the high speed real-time

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image processing electronic means which inserts the high frame channel image onto the background scene enables an image from high frame rate source channel to be inserted at any location in the background scene.

However, Richards et al. teaches at least two low frame rate source (Col. 2, Lines 30-32, Lines 47-54; (backdrop data is background image), Col. 4, Lines 35-37; (backdrop data stored in storage 16 see figure 2), Col. 11, Lines 7-10; (Background image data is low frame rate data) channels for forming a background scene (Col. 5, Lines 51-59; (back drop data fed back on dual digital channel), Col. 2, Lines 30-32, Lines 47-54), at least one high frame rate source channel (Col. 16, Lines 14-16, figure 3) and the high speed real-time image processing electronic means which inserts the high frame channel image onto the background scene enables an image from high frame rate source channel to be inserted at any location in the background scene (Col. 6, Lines 11-22, Col. 8, Lines 13-16, Col. 10, Lines 40-46, 55-59).

Thus, it would have been obvious to a person of ordinary skill in the art to modify Gwynn's with Richards et al. teaching to provide a multi channel modeling system operating with two background channel; producing a view from a selectable viewpoint of a 3-D computer graphics model of an object for forming a foreground image channel and means for keying the foreground image into the background image to form the output image (Col. 2, Lines 22-34).

In reference to claim 12-18 Gwynn fails to teach the frame rates are synchronized, the high frame rate source provides partial frames; the higher frame rates are assigned to target objects; a head slaved display device with an area of interest and display can be used form simulation purposes.

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However, Richards et al. discloses the frame rates are synchronized (Col. 11, Lines 7-23), the high frame rate source provides partial frames (Col. 11, Lines 18-23); the higher frame rates are assigned to target objects (Col. 11, Lines 7-10, Lines 14-16); a head slaved display device with an area of interest and display can be used for simulation purposes (Col. 10, Lines 25-61, Lines 64 to Col. 11, Line 23).

Thus, it would have been obvious to a person of ordinary skill in the art to modify Gwynn's with Richards et al. teaching to provide a multi channel modeling system operating with two background channel; producing a view from a selectable viewpoint of a 3-D computer graphics model of an object for forming a foreground image channel and means for keying the foreground image into the background image to form the output image (Col. 2, Lines 22-34) and this multi-channel modeling system has application to combat situation target oriented head mounted display device (Col. 10, Lines 25-62).

Response to Arguments

5. Applicant's arguments, see remarks, filed 05-10-2006, with respect to the rejection(s) of claim(s) 11-18 under traversing of office action mailed on 12-09-2005 have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Gwynn (US 6,259,429) in view of Richards et al. (US 5,694,533).

Applicant argues cited references fail to teach multi-channel background scene data.

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Examiner disagrees as “multi-channel background scene data” is well known in the art (see Mino et al. (5,900,566, Col. 2, Lines 43-48, Abstract, Qu et al. (5,337,096) Col. 2, Lines 56-68, Ashbey (US 5,636,036) Col. 9, Line 32 to Col. 10, Line 26, Col. 11, lines 48-59, 4-20, Col. 12, Lines 25-49).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ashbey (5,636,036) Interactive video system having frame recall dependent upon user input and current displayed image.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Prabodh M. Dharia whose telephone number is 571-272-7668. The examiner can normally be reached on M-F 8AM to 5PM.

8. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any response to this action should be mailed to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

PD

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June 16,2006



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